

# Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs

Strategic Plan  
2013-2015



## A Message from the Secretary

Welcome to the Executive Office of Energy and Environmental Affairs (EEA), the first state Cabinet-level office in the nation that oversees both environmental and energy agencies. In putting energy and environment under one roof, Governor Deval Patrick set a course toward a clean energy future, and the six agencies under EEA are following that direction with vigor, in close collaboration with the Legislature and many outside partners.

The agencies and offices of EEA also preserve open space, species habitat, and working landscapes; enforce pollution laws to protect public health and natural resources; review the environmental impact of major real estate and infrastructure developments; enhance the state's role in energy conservation and production; manage fish and wildlife; and provide opportunities for outdoor recreation and access at the parks, beaches, and farms that make Massachusetts such a wonderful place to live, work, and play.

Explore this document to discover what the EEA agencies do to steward our precious natural resources and create a cleaner, healthier, and more beautiful Commonwealth for residents and visitors alike – and take advantage of all that Massachusetts has to offer.

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## Background

On April 11, 2007, Governor Deval Patrick's Cabinet reorganization took effect, creating the Executive Office of Energy and Environmental Affairs and adding to the Executive Office the Commonwealth's two energy-related agencies: the Department of Public Utilities and the Division (now Department) of Energy Resources. Our commitment to protecting our environment now recognizes the importance of energy efficiency; making renewable energy a reality in our state, and reducing our dependence on fossil fuels; diversifying our energy sources; and leading the country in energy technology innovation.

Secretary Richard K. Sullivan Jr. oversees the Commonwealth's six environmental, natural resource and energy regulatory agencies: the Departments of Agricultural Resources; Conservation and Recreation; Energy Resources; Environmental Protection; Fish and Game; and Public Utilities.

Within the Secretariat are a number of offices, including: Massachusetts Environmental Policy Act Office (MEPA), Massachusetts Office of Coastal Zone Management (CZM), Office of Law Enforcement (Environmental Police), the Office of Technical Assistance, and the Division of Conservation Services.

The Secretary of EEA also serves as chair of the board of two related public authorities: the Massachusetts Water Resources Authority (MWRA) and the Massachusetts Clean Energy Center (CEC).

## Section I: Mission and Policy Context

### Mission

The Executive Office of Energy and Environmental Affairs develops and executes policies on behalf of the residents of the Commonwealth that balance sustainable economic growth, quality of life, and resource protection, in order to ensure that Massachusetts is a great place to live, work, learn, and play for generations to come.

(EEA's statutory mission can be found in Massachusetts General Laws, Chapter 21A, Section 2)

### Vision

A Commonwealth that continues to lead the nation in energy and environmental affairs, as demonstrated by:

- Reliable, clean, and cost-effective energy
- More of our energy expenditures are invested in the state; and energy efficiency is our first fuel.
- A world-leading clean energy sector
- Ease of doing business
- Thriving fishing, agricultural, and forestry industries
- Natural environment with diverse wildlife resources for all to enjoy
- Air, ground, and water quality that enhance public health
- Low greenhouse gas emissions
- Abundant, affordable, and superior quality local food, agriculture, and fishery products





## Achievements

Massachusetts has been recognized regionally and nationally for efforts to spur economic growth while protecting our natural resources

### Awards and Firsts

- **1<sup>st</sup>** in the nation for energy efficiency—for the second year in a row – as ranked by ACEEE (American Council for an Energy-Efficient Economy), the only other state besides California to ever be recognized
- **2<sup>nd</sup>** in the nation for “direct sales” at the farm and **4<sup>th</sup>** in the nation for number of farmers’ markets
- Winner of a 2012 “Bright Ideas” award from Harvard University’s Ash Center for Democratic Governance and Innovation for the Department of Agriculture’s *MassGrown & Fresher* initiative promoting greater access to locally grown and produced agricultural products
- New Bedford is **1<sup>st</sup>** in the nation for highest valued fish catch for the 12<sup>th</sup> year in a row
- **1<sup>st</sup>** in the Northeast for number of dams removed to improve fish passage and river ecology
- Home to the **1<sup>st</sup>** commercial large blade test facility in the nation
- **2<sup>nd</sup>** in the nation by a 2010 report by Clean Edge Inc. on regulatory incentives, financial incentives, knowledge capital, and economic/workforce development
- **“Best Prepared”** state to compete in a global innovation-based economy by the Kaufman Foundation in 2010
- Nearly a **50-fold** increase in megawatts of solar installed
- **30-fold** increase in megawatts of wind installed
- **100,000** acres protected since Governor Deval Patrick took office
- **1<sup>st</sup>** in the nation to adopt an Ocean Management Plan
- Poised to be home to Cape Wind, the **1<sup>st</sup>** off-shore wind project in the nation
- **100+** Green Communities

### Green Communities have to meet five criteria

- **Adopt as-of-right siting for renewable or alternative energy generation, R & D, or manufacturing**
- **Adopt expedited permitting process**
- **Create an energy reduction plan to reduce energy use by 20 percent in 5 years**
- **Purchase only fuel-efficient vehicles**
- **Minimize life cycle cost in new construction, i.e., adopt the Stretch Code**



## Legislative and Policy Achievements

<b>Green Communities Act</b>	<b>Green Jobs Act</b>	<b>Massachusetts Ocean Plan</b>	<b>Global Warming Solutions Act</b>	<b>2020 Clean Energy and Climate Plan</b>	<b>2012 Energy Bill</b>
Comprehensive reform of the state's energy policies	Job growth and economic development in the state's clean energy industry	Nation's first comprehensive plan to protect critical marine resources and foster sustainable ocean use	Established nation's most aggressive greenhouse gas reduction targets	Ambitious but practical framework to continue – and accelerate – MA's transition to clean energy	Protects MA ratepayers while providing greater reliability and energy independence

## Other Achievements

The Executive Office of Energy and Environmental Affairs has experienced a number of other achievements that often cannot be measured by rankings, trophies or awards. We are proud of these accomplishments, several of which are highlighted below:

- The Commonwealth has seen an 11.2% increase in clean energy jobs in 2012, and is poised to achieve similar, if not greater, growth next year
- The Commonwealth's consumers have saved nearly 40% on their electricity bills over the last three years
- Massachusetts' progressive implementation of net-metering, a valuable incentive to customers who install renewable energy technology, encourages development of clean energy resources and its industry
- Boat waste discharge is now banned in virtually all waters off the Massachusetts coast
- Facilities owned and operated by the Commonwealth are *Leading by Example*. Massachusetts has set aggressive targets for reducing greenhouse gas emissions, and for promoting energy conservation and efficiency, renewable energy, green buildings and water conservation. DFG and the Division of Capital Asset Management are building a new MassWildlife headquarters which will be the first zero-net energy state office building
- DEP established the Clean Energy Results Program to help alternative energy sites get built, by adding resources to provide more technical, scientific, and facility assistance and guidance to steward the process in a more engaged manner.
- EEA and our municipal partners have helped to create or renovate more than 150 parks in urban communities
- EEA has engaged in comprehensive regulatory reform, particularly at DEP where more than 20 changes have been made to make processes easier for business and residents, while maintaining environmental standards
- US Bureau of Ocean Energy Management designates Wind Energy Area offshore Massachusetts for potential commercial leasing, citing its tremendous energy generation potential.



## Challenges

While Massachusetts is recovering from our recent recession faster and stronger than most states, we are still operating in a challenging fiscal environment. Similar to other governmental organizations, EEA and its agencies are routinely asked to deliver more value with fewer resources. Attracting and retaining highly-qualified and experienced personnel is difficult. In tough economic times, EEA often lacks the resources to hire sufficient numbers of needed talent. Additionally, current market economies require the government to create incentives to promote much of EEA's agenda. Frequently, private sector capital seeks greater and shorter-term financial returns that are difficult to achieve in environmentally-focused projects.

One of the biggest challenges we face has prompted us to create the aggressive goals we have set for renewable energy. We sit at the end of the energy pipeline. With no in-state fossil fuel resources, we are forced to import to meet almost all of our energy needs. We spend \$22 billion each year to run our power plants, fuel our vehicles and businesses, and heat our

buildings. Of that, we spend \$18 billion on out-of-state energy sources. Our challenge is to grow the renewable energy industry here in the Commonwealth, and keep those energy dollars right here in Massachusetts.

Global climate change also poses a critical and growing challenge for the Commonwealth. In carrying out its mission, EEA will pursue its goals in a sustainable manner that minimizes the release of climate-changing causing greenhouse gases, minimizes the exposure of people, public infrastructure, capital, natural resources and other species to the harmful effects of climate change, and builds resilience to adapt to a rapidly changing world.

Massachusetts has recently been awarded 1<sup>st</sup> place for energy efficiency and 2<sup>nd</sup> place for clean energy nationally. While these awards recognize our achievements, they put EEA in the challenging position of maintaining our position as national leaders in these fields, with limited capacity in an increasingly more competitive environment.

## Other Challenges

- Balancing resource management and the need for long-term economic development
- Economic viability of small businesses in legacy resource-based industries (i.e. family farms, commercial fishermen)
- Project siting difficulties ("not in my backyard")
- Renewable energy sources aren't priced competitively in today's energy markets
- Preparedness for extreme weather events

- Much of our infrastructure is old, from parks to pipelines and everything in between
- Reliability of electrical distribution infrastructure for a smart and responsive grid
- Balancing a short and long term economic benefit with potential long term environmental harm, sometimes without consensus on the nature and extent of the harm
- Historic underinvestment in information technology



## Section II: Measureable Goals and Actions

### Supporting the Governor's Priorities

EEA supports Governor Patrick's top four priorities: closing the achievement gap, eliminating youth violence, creating jobs and containing health care costs. EEA plays a critical role in helping create jobs. It does so by promoting the development of the clean energy sector; enhancing access to cost-effective energy; supporting commercial fishing, forestry and farming industries; investing in water and sewer infrastructure; and conducting efficient and responsive permitting.

Examples include the Commonwealth's 11.2% growth in clean energy jobs in 2012 and the establishment of the Clean Energy Results Program, where DEP provides assistance and guidance to help alternative energy sites get built.

### Goals and Actions

To develop our goals, we took a comprehensive look at the work within EEA, its agencies and offices, starting with a series of strategic planning discussions Secretary Sullivan held with EEA leadership and Commissioners earlier this year. We kept Governor Patrick's perspective in mind that the interests of Massachusetts citizens are best served by integrating the work to safeguard the environment while ensuring our energy future.

After this review, we observed that our goals fit into three broad themes that actually unified the various organizations more than the common "energy" versus "environmental affairs" dichotomy. They are:

**SUSTAINABLE ECONOMIC  
DEVELOPMENT**

**QUALITY OF LIFE**

**RESOURCE PROTECTION**

On the following pages you will find our measureable goals (organized by theme) and selected actions EEA, its agencies and offices, are taking to achieve them.

***It is important to note that in all that we do, whether a strategic priority or a basic element of our mission, we strive to demonstrate our core values of civility, professionalism, courtesy and respect in all interactions with fellow staff members, stakeholders, and the public***

THEMES	MEASURABLE GOALS	SELECTED ACTIONS
<b>SUSTAINABLE ECONOMIC DEVELOPMENT</b>	Conduct permitting efficiently and responsively	Comprehensive regulation reform to ensure permitting at the speed of business
		Implementing permitting best practices by improving processes, tracking cycle time and backlogs, and educating permit seekers
		Investing in comprehensive Information Management reforms
	Plan, regulate, and invest consistent with the Massachusetts Sustainable Development Principles	Work with Executive Office of Housing and Economic Development and MassDOT on regional planning initiatives to identify priority development and priority conservation areas
		Transportation, Smart Growth, and Land Use Implementation Subcommittee of the Global Warming Solutions Act implementation committee
		Working with various MA regional planning organizations on specific initiatives (e.g., South Coast Rail corridor planning)
	Promote the development of an innovative clean energy and efficient energy resources sector in Massachusetts	The Clean Energy Results Program is a partnership between DOER and DEP to advance the permitting and development of renewable energy and energy efficiency projects across the Commonwealth
		The MA Farm Energy Program provides farmers engaged in agricultural endeavors a discount on their electricity and natural gas bills
		The Massachusetts Clean Energy Center is the first state agency in the nation dedicated solely to facilitating the development of the clean energy industry
		Supporting investment and production tax credits for renewable energy
	Support the Commonwealth's legacy, resource-based industries (i.e., commercial fishing, farming, and forestry)	Secured federal disaster declaration and relief for ground fishermen
		Creation of a revolving loan fund for small fishing businesses
		Education available on best management practices
		Ecological restoration projects are spurring local increases in green jobs
		Promoting long-term forest cutting plans
		Investing in working farms through Agricultural Preservation Restrictions and support for business development planning



THEMES	MEASURABLE GOALS	SELECTED ACTIONS
QUALITY OF LIFE	Protect public health by ensuring healthy air, safe drinking water, and low exposure to contaminants	EEA and its agencies monitor air quality and require testing of drinking water to ensure they meet standards set by the Environmental Protection Agency
		Regular testing of shellfish growing areas
		Clean up contaminated sites (in some cases utilizing DEP's Mobile HazMat Lab)
	Improve access to and quality of outdoor recreational opportunities	EEA invests in current and new facilities and programs; has created programs, like Gateway City Parks, dedicated to improving the Commonwealth's urban parks; and developed sponsorship and partnership opportunities within communities (for example, New Balance "sponsors" the walkways along the Charles River near its headquarters, clearing them of snow during the winter)
		Fish stocking for recreational fishing opportunities in 500 water bodies throughout the Commonwealth
	Increase the public's access to locally-grown food, agriculture, wood, and fisheries products	<i>MassGrown &amp; Fresher</i> initiative promotes access to locally grown and produced agricultural products
		The brand, Commonwealth Quality, was designed to identify locally sourced products grown, harvested, and processed in the Commonwealth
		Created the Seafood Marketing Commission to support local seafood businesses
		Through the Farm to School Program, EEA provides technical assistance to Massachusetts farmers and schools to get healthy, locally-grown food in the Commonwealth's schools
	Enhance access to reliable, efficient, clean, and cost-effective energy resources within a framework where Massachusetts serves as a national leader in renewable and clean resource development	More than 100 cities and towns have been designated Green Communities, investing in home-grown renewable energy and energy efficiency projects
		EEA is working to meet the Governor's ambitious goals for renewable energy installation
		Utilities are required to purchase a growing percentage of their power from renewable and alternative energy sources
		DOER offers nation-leading programs such as Mass Save, appliance rebates, and other financing and incentive programs for Massachusetts homeowners, renters, businesses and institutions to more effectively manage energy use and costs.
		Initiatives to increase availability of low-cost natural gas, like getting more natural gas into distribution systems and more pipeline capacity across the Commonwealth; working to ensure that power plant dependence on natural gas for generation does not compromise electricity reliability

THEMES	MEASURABLE GOALS	SELECTED ACTIONS
<b>RESOURCE PROTECTION</b>	Reduce greenhouse gas emissions 25% below 1990 levels by 2020, and at least 80% below 1990 levels by 2050	RGGI implementation; advanced building energy codes;; Clean energy imports; energy efficiency commitments by utilities; land use reforms
		Regional Greenhouse Gas Initiative (RGGI) and Transportation and Climate Initiative (TCI)
		Collaboration with MassDOT and Executive Office of Housing and Economic Development to coordinate strategies to reduce green house gas emissions
	Conserve open space and working landscapes for current and future generations to provide clean air, clean water, and wildlife habitat	Wildlife and habitat restoration efforts such as Bald Eagle, New England Cottontail, Upland Habitat, Anadromous Fish, Eelgrass and Ecological Restoration programs
		Through land acquisitions, and multiple programs like the Agricultural Preservation Restriction, Wildlands Stamp, and Conservation Restriction and grant programs, EEA and its agencies are working to permanently protect our open space and natural resources
	Manage fresh water and ocean resources in a sustainable manner	The Sustainable Water Management Initiative (SWMI) is an effort to develop a water allocation program that examines solutions to satisfying water needs while recognizing ecological issues like low stream flow
		Maintain compliance with # interstate and federal fisheries management plans
		The mission of EEA's Office of Coastal Zone Management is to balance the impacts of human activity with the protection of coastal and marine resources.



## Section III: Measures

Here find the measures that will inform EEA leadership and other stakeholders if we are achieving our goals.

THEMES	MEASURABLE GOALS	PROPOSED MEASURES
<b>SUSTAINABLE ECONOMIC DEVELOPMENT</b>	Conduct permitting efficiently and responsively	% permit applications that are reviewed within the guaranteed timelines
		% of permit applications that are reviewed within 180 days of receipt
		# pre-permit assistance meetings conducted for complex projects
		% of adjudicatory appeals resolved within X months from when the appeal is filed (X value still being determined)
	Plan, regulate, and invest consistent with the Massachusetts Sustainable Development Principles	# acres consumed per housing unit
		# acres consumed per X commercial square footage built (X value still being determined)
		% of development occurring inside areas designated for growth
		% median household income comprised of housing and transportation costs
	Promote the development of an innovative clean energy and efficient energy resources sector in Massachusetts	# businesses (total, new)
		# employees (total, new)
		\$ revenue for sector (total, new)
		\$ investment in sector (total, new)
		# MW of clean energy installed
	Support the Commonwealth's legacy, resource-based industries (i.e., commercial fishing, farming, and forestry)	For each sector (commercial fishing, farming, and forestry):
		# businesses (total, new)
		# employees (total, new)
		\$ revenue
		\$ investment

THEMES	MEASURABLE GOALS	PROPOSED MEASURES
QUALITY OF LIFE	Protect public health by ensuring healthy air, safe drinking water, and low exposure to contaminants	Massachusetts' annual attainment status for the six National Ambient Air Quality Standards (NAAQS)
		% of "community" public drinking water systems that meet all applicable health-based standards
		% of contaminated sites (oil or hazardous materials) that are cleaned up within 6 years of first being identified or listed
		% of contaminated sites with imminent hazard conditions where the imminent hazard is resolved within 90 days
	Improve access to and quality of outdoor recreational opportunities	# park passes sold or distributed to communities
		# public municipal parks built or restored
		# boat ramps, fishing piers, canoe/cartop access sites, & ramps built or renovated
		# fishing & hunting licenses
	Increase public's access to locally-grown food, agriculture, wood, & fisheries products	# CQP participants (Commonwealth Quality Program) by sector (produce, forestry, aquaculture, lobster)
		# schools participating in "Farm to School" program
		# farmers' markets, and % of farmers' markets participating in SNAP
		# of urban communities establishing guidelines and/or regulations encouraging the development of commercial agricultural enterprises
	Enhance access to reliable, efficient, clean, and cost-effective energy resources within a framework where Massachusetts serves as a national leader in renewable and clean resource development	# Green Communities
		# MW of solar/wind sited and in use (RPS and APS-qualified)
		# MW of renewable or alternative energy installed
		SAIDI performance for each electric distribution company (System Average Interruption Duration Index)
		SAIFI performance for each electric distribution company (System Average Interruption Frequency Index)
		National ranking of retail cost of energy
		Massachusetts ACEEE ranking



THEMES	MEASURABLE GOALS	PROPOSED MEASURES
RESOURCE PROTECTION	Reduce greenhouse gas emissions 25% below 1990 levels by 2020, and 80% by 2050	# of million metric tons CO2-equivalent reduction from 1990 levels by sector (Buildings, Electricity Supply, Transportation, Non-energy)
		Progress in implementing GWSA policies
	Conserve open space and working landscapes for current and future generations to provide clean air, clean water, local agricultural assets, and wildlife habitat	# acres protected (total, new)
		# acres habitat protected
		# acres farm & forest working lands protected
		# acres of prime and state important soils
		# acres water supply protected
		# and % of acres protected for BioMap2 core habitat and critical natural landscapes, prime farm/forest soils, etc.
	Manage fresh water and ocean resources in a sustainable manner	# gallons water used per person per day
		% of assessed rivers, lakes, and estuaries that are determined to be "impaired" (as defined by the Clean Water Act) every other year
		Net gain/loss of wetlands, as measured by the number of wetlands acres lost and gained/restored each year
		# of river miles restored annually
		Economic value and total production capacity of offshore renewable energy in state and adjacent federal ocean waters

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